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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,875	01/19/2001	John E. Hoffmann	2479.1073-001	9763
21005	7590	03/22/2004	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			HA, DAC V	
			ART UNIT	PAPER NUMBER
			2634	6
DATE MAILED: 03/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/766,875	HOFFMANN ET AL.	
	Examiner	Art Unit	
	Dac V. Ha	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 January 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 and 10-13 is/are rejected.
- 7) Claim(s) 9 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 2, 5, 12, 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Narvinger et al. (US 6,381,229) (hereinafter Narvinger).**

Regarding claim 1, Narvinger teaches the followings.

“encoding pilot symbols … access channel” (Figures 1, 2; Col. 2, lines 40-45; Col. 7, lines 40-41; Col. 8, lines 3-6);
“encoding data symbols … data symbols” (Figures 1, 2; Col. 2, lines 49-65; Col. 6, line 67 to Col. 7, line 3; Col. 8, lines 32-49).

Note, the claimed subject matter “a transmitter” is inherent since the signal is for communication between mobile station and base station.

Regarding claim 2, Narvinger further teaches the followings.

“at a receiver” (Figure 6, element 10);
“obtaining a pilot … correlation filter” (Figure 7; Col. 11, lines 2-59);
“obtaining a data symbol … correlator” (Figure 9; Col. 12, lines 9-43);
“using the pilot … data symbols” (Figure 6; Col. 9, line 61 to Col. 11, line 2).

Regarding claim 12, Narvinger further teaches the claimed subject matter “feeding ... peak detector” in Figure 7, element 202; Col. 11, lines 3-59.

Regarding claim 13, Narvinger further teaches the claimed subject matter “determining ... detected peaks” in Figure 7, element 202; Col. 11, lines 40-59.

Regarding claim 5, Narvinger further teaches the claimed subject matter “wherein ... payload portion” in Col. 4, lines 20-21).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 3, 4, 6-8, 10, 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Narvinger.

Regarding claim 6, Narvinger teaches that the communication between the mobile station and the base station is a two-way communication. While claim 1 calls for processing the random access signal implying that such signal would have come from a mobile station, claim 5 seems to contradict with such claimed invention (i.e. the transmitter is at the base station). Nevertheless, one skilled in the art would have understood that both the base station and the mobile station comprise the transmitter (i.e. for transmitting pilot signal).

Regarding claim 7, the claimed subject matter “detecting … pilot symbols” would have been obvious to one skilled in the art.

Regarding claim 8, the claimed subject matter “detecting … data symbols” would have been obvious to one skilled in the art.

Regarding claim 10, Seki further teaches the claimed subject matter “receiving … to detect information received” is a known process at the receiver in the Abstract; Col. 4, lines 38-44; Col. 4, line 63 to Col. 5, line 7; Col. 1, lines 64-65; Col. 13, line 64 to col. 14, line 6; Col. 14, line 66 to Col. 15, line 41.

Regarding claim 3, Seki further suggests the teaching of the claimed subject matter “extracting … data symbols” in Col. Col. 4, lines 38-44; Col. 4, line 63 to Col. 5, line 7; Col. 1, lines 64-65; Col. 9, lines 3-44.

Regarding claim 4, Seki further suggests the teaching of the claimed subject matter “extracting … data symbol correlator” in Col. Col. 4, lines 38-44; Col. 4, line 63 to Col. 5, line 7; Col. 1, lines 64-65; Col. 9, lines 3-44.

Regarding claim 11, Seki further suggests the teaching of the claimed subject matter “wherein … data symbols” in Col. Col. 4, lines 38-44; Col. 4, line 63 to Col. 5, line 7; Col. 1, lines 64-65; Col. 9, lines 3-44.

Allowable Subject Matter

5. **Claim 9** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Karna et al. (US 6,594,248) disclose a Data Transmission Method And A Radio System.

Guo et al. (US 6,389,034) disclose a System For Providing Stream Based And Packet Based Services.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Dac V. Ha
Examiner
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